

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2013  
 DateRun: 09/29/2013  
 Experimenters: Junhee Cho, Loc Nguyen, Jonathan Oljey, Eyob Befekadu  
 ClientType: Cleaning Equipment Mfr  
 ProjectNumber: Project #1  
 Substrates: Vinyl Composite Tiles  
 PartType: Coupon  
 Contaminants: Food  
 Cleaning Methods: Mechanical Agitation  
 Analytical Methods: Gravimetric, Visual, Timing  
 Purpose: To evaluate effectiveness of removing baking soda using provided  
 Experimental Procedure: A second round of testing was conducted using 120 grams of baking soda. The soil was spread across 40 square feet of floor tile (3 grams per tile). The Qleeno unit was operated on lowest water output, medium water output, and high-water output all with highest water suction.  
 Methods Evaluated: Qleeno; Mop

Results: After cleaning, baking soda left behind a residual of white streaks. Higher flow helped in reducing the streaking. The wet mop was by far the least effective at cleaning the fine particles from the surface. The high flow with high suction was the fastest and most effective cleaning method evaluated. The medium flow had nearly the same collection efficiency but required a little more time to complete the provided area.

**Baking Soda Tests**

No obstacle	Type of mop	Initial soil wt (g)	Residual soil on floor(g)	collected soil from floor (g)	soil removal (%)	AVG of soil removal (%)	Time for cleaning(sec)	Observations
30-Sep	Qleeno	121.59	18.26	103.33	84.98	77.82	60	Low flow with High suction
	Qleeno	120.41	24.00	96.41	80.07		74	Low flow with High suction
	Qleeno	120.10	37.93	82.17	68.42		65	Low flow with High suction
17-Oct	Qleeno	120.03	16.66	103.38	86.12	84.59	61	Medium flow with High Suction
	Qleeno	120.24	16.97	103.27	85.88		64	Medium flow with High Suction
	Qleeno	120.07	21.89	98.18	81.77		63	Medium flow with High Suction
21-Oct	Qleeno	120.56	16.17	104.39	86.59	84.70	52	High flow with High Suction
	Qleeno	120.59	23.06	97.53	80.87		55	High flow with High Suction
	Qleeno	120.00	16.04	103.96	86.63		44	

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								High flow with High Suction
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Summary:

<b>Substrates:</b>		Vinyl Composite Tiles				
<b>Contaminants:</b>		Food				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>	
Water	Water	100	56.98	<input type="checkbox"/>	mop	
Water	Water	100	77.82	<input type="checkbox"/>	Qleeno low flow	
Water	Water	100	84.59	<input checked="" type="checkbox"/>	Qleeno medium flow	
Water	Water	100	84.70	<input checked="" type="checkbox"/>	Qleeno high flow	

Conclusion:

The use of Qleeno with the settings on medium flow and high flow both on high suction was effective in removing soil from the floor with an 85% efficiency and around 1 minute of cleaning for the 40 square feet.